

Claims:

1. A method of creating a lightpath between a source and a destination in an optical communications system a utilizing network management system (NMS) comprising:
  - selecting lightpath parameters;
  - selecting lightpath endpoints at the source and destination; and
  - completing the lightpath through intermediate nodes.
2. The method as defined in claim 1 wherein the lightpath is completed through intermediate nodes using an automatic selection algorithm.
3. The method as defined in claim 1 wherein the lightpath is completed through intermediate nodes using a manual selection process.
4. The method as defined in claim 1 wherein the lightpath is completed using a combination of an automatic selection algorithm and a manual selection process.
5. The method as defined in claim 1 wherein lightpath parameters include: lightpath name; protocol, bit rate, source node lambda end point and destination node lambda end-point.
6. The method as defined in claim 1 wherein the step of selecting endpoints include the selection of particular intermediate nodes that the lightpath will traverse.
7. The method as defined in claim 1 wherein the step of selecting endpoints includes the selection of wavelengths for the lightpath.

8. The method as defined in claim 7 wherein the selection of wavelengths is implementable at intermediate nodes.

9. The method as defined in claim 2 wherein after the lightpath has been selected automatically, an operator may reject and select different wavelengths for some or all of the wavelengths in the lightpath.

10. A network management system (NMS) for creating a lightpath between a source and a destination in an optical communication system, the NMS comprising:

means for viewing and selecting lightpath parameters;

means for viewing and selecting lightpath endpoints at the source and destination; and

means for completing the lightpath through intermediate nodes.

11. The NMS as defined in claim 10 having a graphical user interface (GUI) for displaying lightpath parameters and input means for selecting.

12. The NMS as defined in claim 11 wherein an operator can manually complete the lightpath.

13. The NMS as defined in claim 11 for implementing an automatic selection algorithm to automatically complete the lightpath.

14. The NMS as defined in claim 11 wherein the lightpath is completed utilizing manual selection and an automatic selection algorithm.

15. The NMS as defined in claim 13 wherein, after the lightpath has been selected automatically a user can change lightpath parameters.

16. The NMS as defined in claim 15 wherein lightpath parameters include wavelengths on a complete lightpath.
17. The NMS as defined in claim 15 wherein wavelengths can be changed for lightpath segments.